

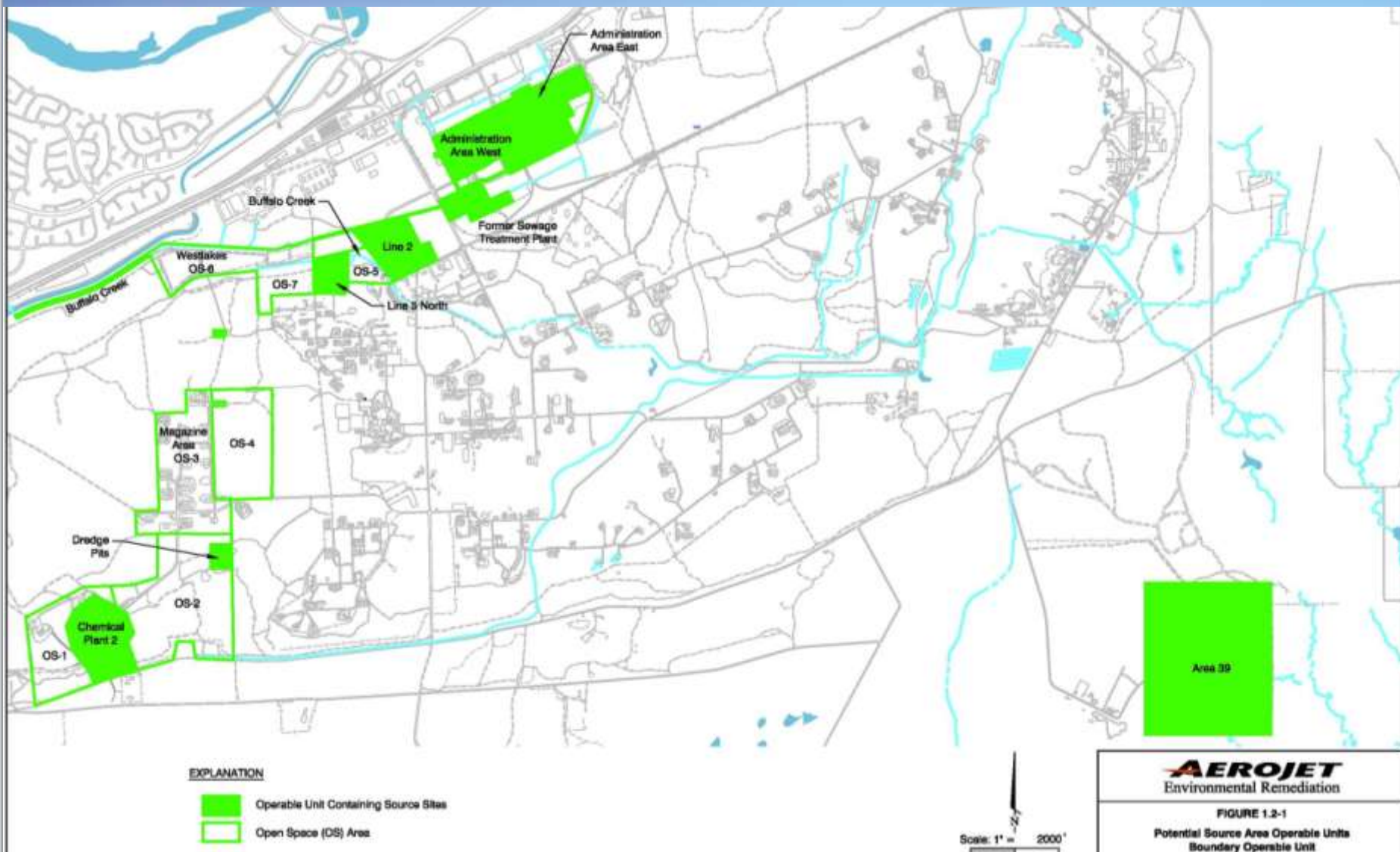




Community Advisory Meeting – Aerojet Superfund Issues BOU Ecological Risk Assessment

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January 18, 2012

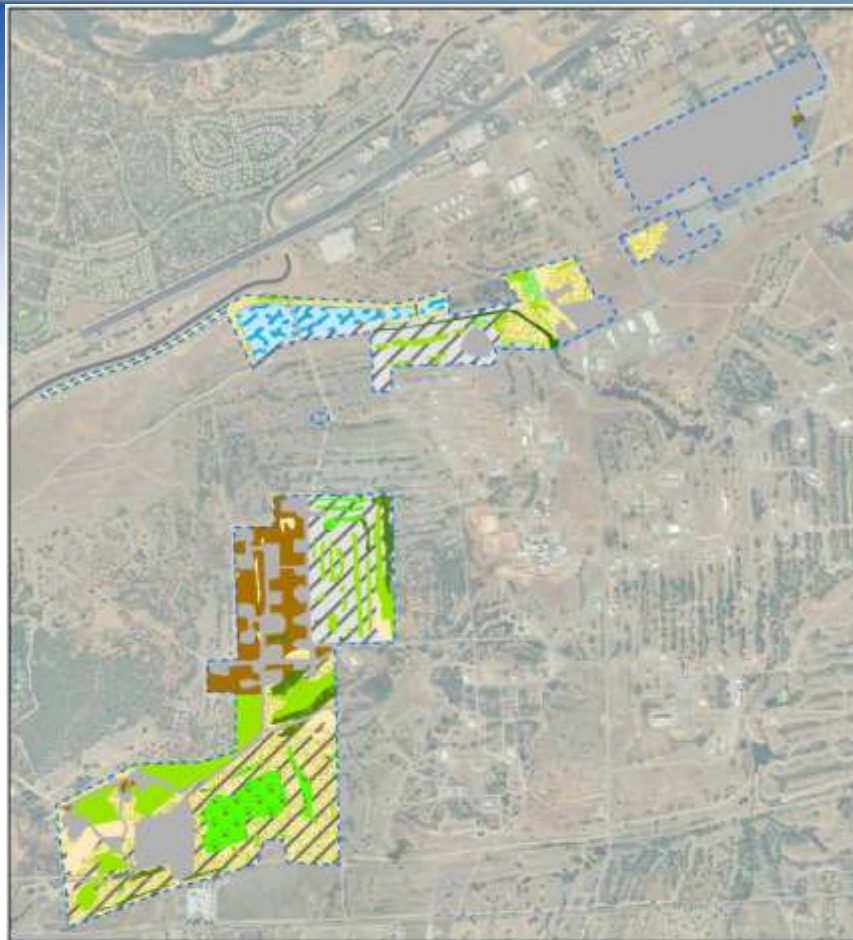
BOU Management Areas



SLERA General Approach

- Conducted evaluation of ecological habitat
- Prepared RI Work Plan and ERA White Paper
- Developed Ecological Screening Levels (ESLs)
- Identified COPECs
- Goal: Reach Scientific Management Decision Points (SMDPs)

Evaluation of Ecological Habitat



File Location: F:\GIS\Map\2003-2004_Airport_Boundary_GIS\Map\2003-2004_Airport_Boundary_GIS.aprx

1:18,000

1 inch equals 1,500 feet

Map Projections: Universal Transverse Mercator (UTM), Zone 18
Datum: North American Datum 1983 (NAD83)

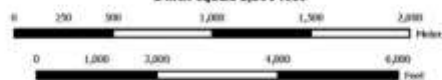


FIGURE 3. Vegetation Communities
2003-2004 Airport Boundary - GUT

Occurrence of Special Status Species

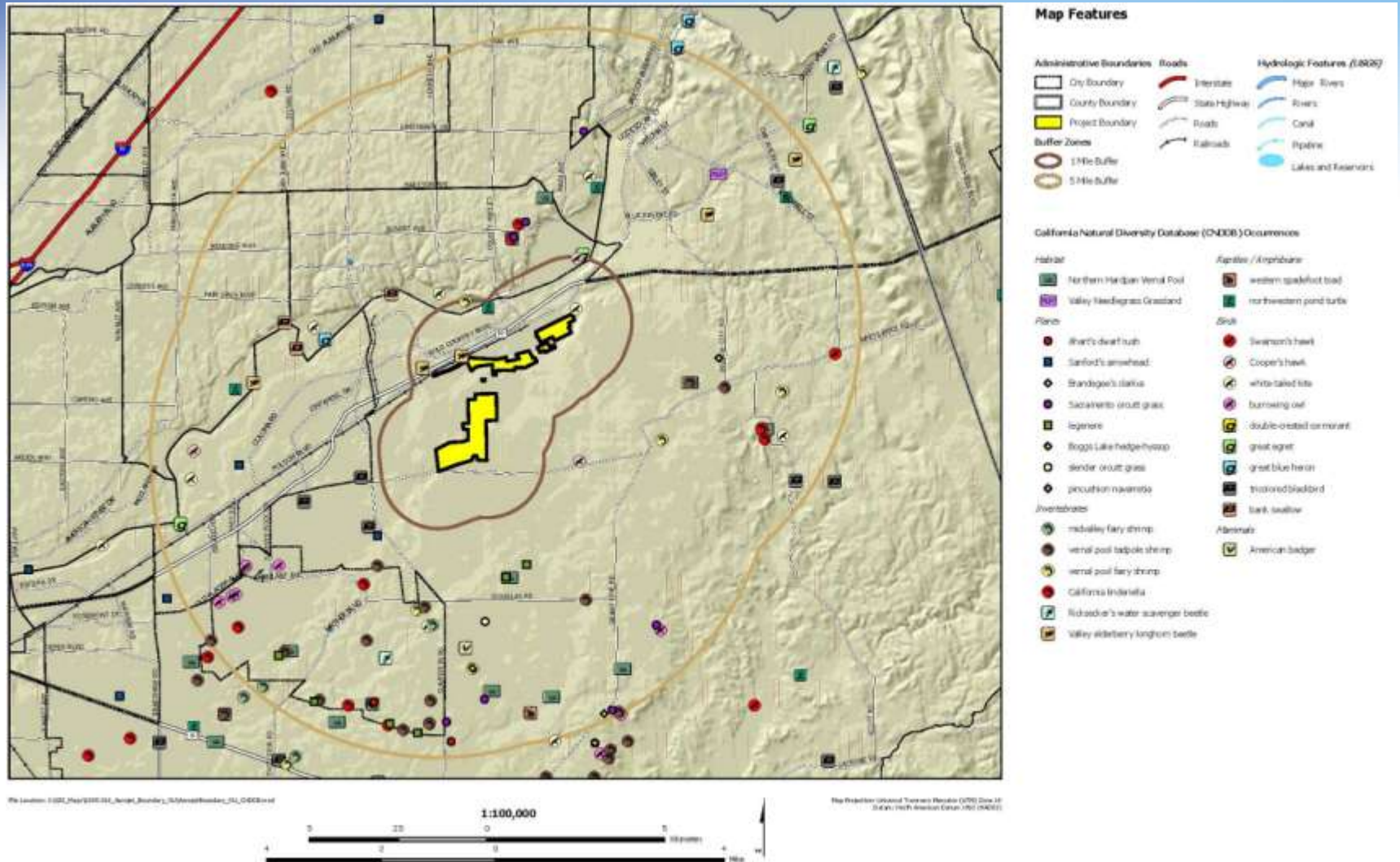


FIGURE 5. CNDD Special-Status Species Map

2003-2004 Amargosa Valley

Ecological Screening Level Development

- ESLs used numerous published sources (conservatively set at NOAEL)
- If no ESL readily available for a chemical, it was derived following USEPA guidance
- Soil ESLs derived for the following, if needed:
 - Meadow vole
 - Short-tailed shrew
 - Long-tailed weasel
 - Mourning dove
 - American woodcock
 - Red-tailed hawk
- Lowest ESL for each chemical (regardless of receptor) selected for use in SLERA.

Identification of COPECs

- Compared RI data against ESLs for each media (for samples from habitat)
 - Soil media – Chemicals in samples collected from upper 6 feet of soil screened against Soil ESLs.
 - If Metal > ESL but metal concentration < background, metals was not COPEC
 - Surface water/sediment – Screened against ESLs.
 - Soil vapor media - Highest concentration of chemical in soil vapor, regardless of depth, at each location screened against SV ESLs. Refined assessment used shallowest depth SV result.

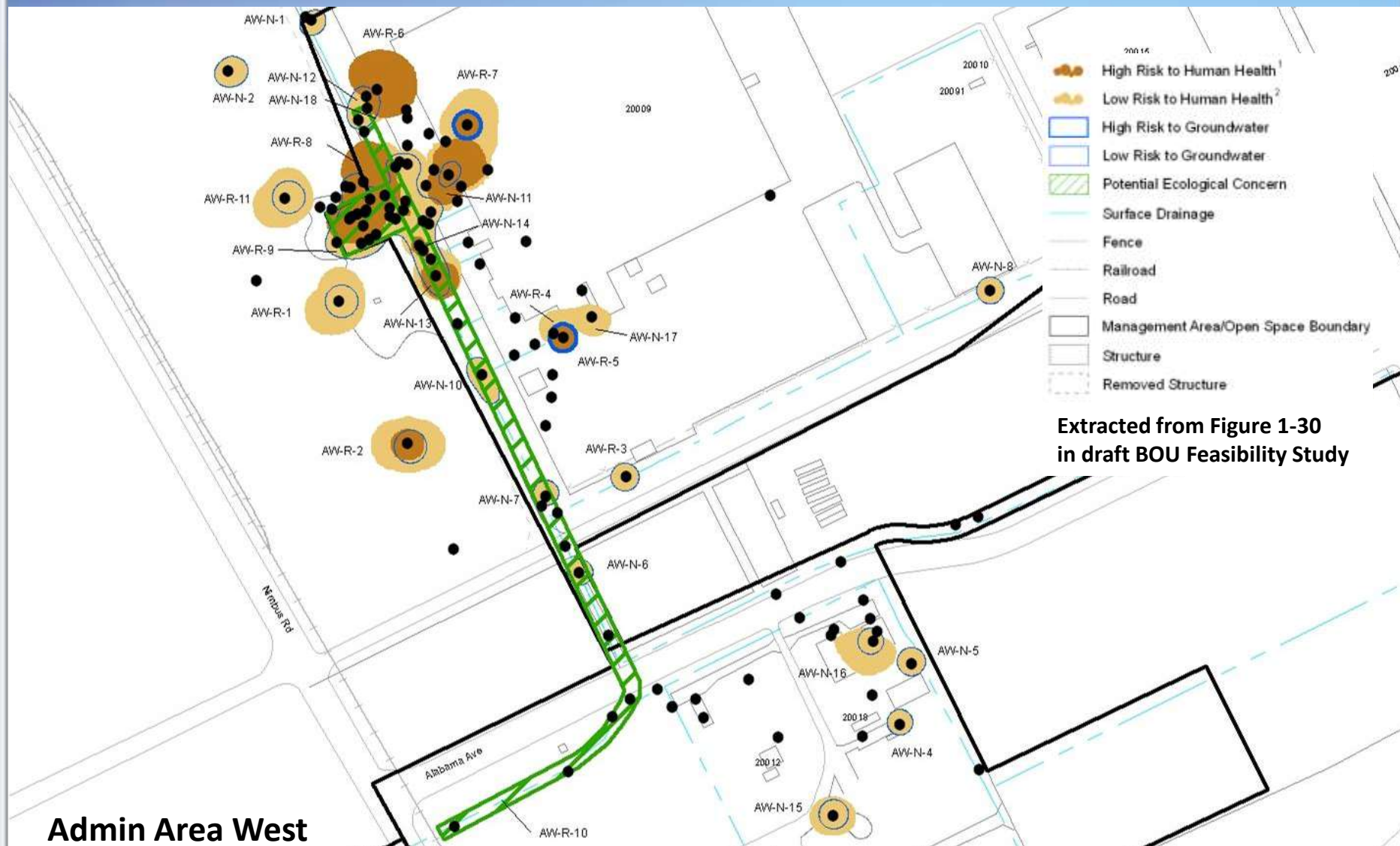
Site Management Decision Points

- Negligible eco risks identified at five MAs, for following reasons:
 - No COPECs exceeding ESLs identified in habitat areas at two MAs (Line 5 North, and Open Space Areas 5 and 7); and
 - COPECs and exceedances of ESLs identified in habitat areas considered limited in magnitude, number, and areal extent at three MAs (Line 2, Magazine Area, and Open Space Areas 1, 2, 3, 4).
- Potential Eco risks required SMDP in Admin Area, Westlakes, Buffalo Creek, Chem Plant 2, Dredge Pit and Eastern Basin, and Area 39

SMDP - Admin Area

- Only data from outside facility areas used in SLERA.
- COPECs identified in drainage ditches could potentially migrate to down-gradient habitats. These drainage ditches were recommended for further evaluation in the FS.

Admin Potential Eco Concern Area



SMDP - Westlakes MA

- Based on multiple COPECs occurring within habitat areas (with levels $> 10\times$ ESLs), potential ecological risks under current conditions were identified in Westlakes
- Westlakes area may undergo residential development in future, which is expected to mitigate eco risk as result of removal of existing habitat

SMDP – Remaining MAs

- For Buffalo Creek, Chem Plant 2, Dredge Pit & Eastern Basin, and Area 39
 - Based on multiple COPECs within habitat areas (with levels > 10x ESLs) and future development unknown,
 - Potential eco risks exist under current conditions.
 - Multiple areas recommended for further evaluation in the FS.
 - Note: Area 39 to be further assessed in BERA, due to numerous COPECs and large size of site.

Area 39 Pond 3

